Appln. No. 10/007,468
Amendment dated March 22, 2006
Reply to Office Action of January 23, 2006

**Amendments to the Claims**:

Please amend claims 1, 2, 5-7, 9, 12, 14-16 and 18 as follows. The following listing of claims will replace all prior versions, and listings, of claims in the application.


**Listing of Claims**:

Claim 1 (Currently Amended).  A liquid crystal display device comprising:

a liquid crystal display panel having a plurality of signal lines, a plurality of scanning lines, and a plurality of display
5   pixels arrayed in a matrix and provided respectively near cross-points between the signal lines and the scanning lines through switching elements; and

a driver which supplies the plurality of signal lines with a display signal in a field period, and which supplies the
10   plurality of scanning lines with a scanning signal, to apply the display signal to the plurality of display pixels, wherein

the driver includes means which supplies an initialization signal including a <u>constant</u> single pulse voltage to the <u>plurality of</u> signal [[line]] <u>lines</u> and supplies a first gate pulse as the
15   scanning signal to the display pixels,

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and after completing the supply of the initialization

signal ~~voltage~~ to the <u>plurality of</u> signal [[line]] <u>lines and</u>

<u>completion of the supply of the first gate pulse to the plurality</u>

<u>of scanning lines,</u> and after a predetermined hold time<u>,</u> supplying

20    the display signal to the <u>plurality of</u> signal lines and supplying

a second gate pulse as the scanning signal to the <u>plurality of</u>

scanning [[line]] <u>lines,</u> thereby applying the display signal to

the display pixel, at least one signal application period set

within the field period, [[and]]

25      <u>the liquid crystal display panel includes a plurality of</u>

<u>pixel electrodes arrayed in a matrix through the switching</u>

<u>elements, common electrodes opposed to the pixel electrodes, and</u>

<u>liquid crystal sandwiched between the pixel electrodes and the</u>

<u>common electrode, and</u>

30      the hold time is set to a time equal to or longer than a

voltage-write response time of <u>the liquid crystal in</u> the display

pixels.


        Claim 2 (Currently Amended).  The liquid crystal display

35    device according to claim 1, wherein

        the liquid crystal display panel ~~includes a plurality of~~

~~pixel electrodes arrayed in a matrix through the switching~~

~~elements, and common electrodes opposed to the pixel electrodes,
and~~

40        ~~the display pixels comprise the pixel electrodes, the common
electrodes, and liquid crystal sandwiched between the pixel
electrodes and the common electrodes~~ is a non-auxiliary
capacitance type.


Claim 3 (Previously Presented).  The liquid crystal display
device according to claim 1, wherein each of the switching
elements of the liquid crystal display panel includes a thin film
transistor.


Claim 4 (Cancelled).


Claim 5 (Currently Amended).  The liquid crystal display
device according to claim 1, wherein
        the initialization signal ~~voltage~~ in the driver has a value
equal to or higher than a maximum voltage value of the display
5    signal.


Claim 6 (Currently Amended).  The liquid crystal display
device according to claim 1, wherein


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the driver applies the initialization signal ~~voltage~~ and the

display signal to the display pixels connected to the scanning

5    lines of the liquid crystal display panel, at a predetermined

time interval, sequentially for every one of the scanning lines,

in the signal application period in the field period, and

the time interval is set to a value at which timings of

applying the initialization signal voltage and the display signal

10   to every one of the display pixels connected to each of the

scanning lines do not overlap with each other.


Claim 7 (Currently Amended). The liquid crystal display

device according to claim 1, wherein

application timing is set such that the driver applies the

initialization signal ~~voltage~~ simultaneously to all of the

5    display pixels of the liquid crystal display panel, and

thereafter applies the display signal to the display pixels

connected to the scanning lines of the liquid crystal display

panel, at a predetermined time interval, sequentially for every

one of the scanning lines, in the signal application period in

10   the field period.

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Claim 8 (Previously Presented).  The liquid crystal display device according to claim 1, wherein

the driver provides three signal application periods in one field period.


Claim 9 (Currently Amended).  The liquid crystal display device according to claim 8, wherein

the display signal comprises first, second, and third color component signals, and

5      the driver applies the initialization signal ~~voltage~~ and thereafter applies any one of the first, second, and third color component signals, to the display pixels connected to the scanning lines of the liquid crystal display panel, sequentially for every one of the scanning lines, in each of the signal

10    application periods of the field period.


Claim 10 (Previously Presented).  The liquid crystal display device according to claim 9, further comprising an illumination light source capable of controlling light emission color,

the illumination light source being controlled to have light

5    emission color corresponding to any one of the first, second, and third color component signals that is applied by the driver in each signal application period.


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Claim 11 (Previously Presented).  The liquid crystal display device according to claim 8, wherein of the display signal, the first color component signal is a red component signal, the second color component signal is a green component signal, and

5   the third color component signal is a blue component signal.


Claim 12 (Currently Amended).  A drive control method for a liquid crystal display device which has a plurality of signal lines, a plurality of scanning lines, and a plurality of display pixels arrayed in a matrix and provided respectively near

5   cross-points between the signal lines and the scanning lines through switching elements, the plurality of display pixels including a plurality of pixel electrodes arrayed in a matrix through the switching elements, common electrodes opposed to the pixel electrodes, and liquid crystal sandwiched between the pixel

10   electrodes and the common electrode, and which supplies wherein the plurality of signal lines are supplied with a display signal in a field period and supplies scanning signals are supplied to the plurality of scanning lines, to apply the display signal to the plurality of display pixels, comprising:

15       providing at least one signal application period in the field period;


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applying an initialization signal including a <u>constant</u> single pulse to the display [[pixel]] <u>pixels</u>, by supplying [[an]] <u>the</u> initialization signal ~~voltage~~ to the <u>plurality of</u> signal

20    [[line]] <u>lines</u> and supplying a first gate pulse as the scanning signal to the scanning [[line]] <u>lines</u>; and

applying the display signal to the display pixels by supplying the display signal to the <u>plurality of</u> signal [[line]] <u>lines</u> and supplying a second gate pulse as the scanning signal to

25    the <u>plurality of</u> scanning [[line]] <u>lines</u> after a predetermined voltage hold time has passed after completion of applying the initialization signal ~~voltage~~ to the display pixels <u>and the first</u> <u>gate pulse to the plurality of scanning lines</u>,

wherein the hold time is set to a time equal to or longer

30    than a voltage-write response time of the <u>crystal liquid in the</u> display pixels.


Claim 13 (Cancelled).


Claim 14 (Currently Amended).  The drive control method according to claim 12, wherein

the initialization signal ~~voltage~~ has a value equal to or higher than a maximum voltage value of the

5    display signal.


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Claim 15 (Currently Amended).  The drive control method according to claim 12, wherein applying the initialization signal ~~voltage~~ includes applying the initialization signal ~~voltage~~ to the display pixels connected to the scanning lines, sequentially
5    for every one of the scanning lines,

applying the display signal includes applying the display signal to the display pixels connected to the scanning lines, sequentially for every one of the scanning lines, and

application timings of applying the initialization signal
10    ~~voltage~~ and the display signal for every one of the scanning lines are set so as not to overlap with each other.


Claim 16 (Previously Presented).  The drive control method according to claim 12, wherein

applying the initialization signal ~~voltage~~ includes applying the initialization signal ~~voltage~~ simultaneously to all display
5    pixels connected to the scanning lines.


Claim 17 (Previously Presented).  The drive control method according to claim 12, wherein

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providing the signal application period in the field period

includes providing three signal application periods in one field

5    period.


Claim 18 (Currently Amended).  The drive control method

according to claim 17, wherein

the display signal comprises first, second, and third color

component signals, and

5    applying the initialization signal ~~voltage~~ includes applying

the initialization signal ~~voltage~~ simultaneously to the plurality

of display pixels connected to the scanning lines, in each of the

signal application periods, and

applying the display signal includes applying any of the

10   first, second, and third color component signals, to the display

pixels connected to the scanning lines, sequentially for every

one of the scanning lines, in each of the signal application

periods.


Claim 19 (Previously Presented).  The drive control method

according to claim 18, further comprising controlling light

emission color of an illumination light source, wherein

controlling of light emission color includes controlling the

5    light emission color of the light source so as to correspond to


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any of the first, second, and third color component signals that

is applied to the display pixels in applying the display signal.

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